chronic inflammation. The study aimed at controlling inflammation using sulfasalazine 500 mg, once a day treatment in comparison to placebo in MetS patients.
**Methods**: A double blind, randomized, placebo controlled study was carried at Sadbhavna Medical and Heart Institute, Patiala. 50 eligible subjects (Male/Female = 45/5, $n = 25$/group), fulfilling the National Cholesterol education Program-Adult Treatment Panel (NCEP-ATP III) diagnostic criteria of MetS, were randomly assigned to once daily drug or placebo tablets for 20 weeks. Blood pressure, hsCRP, TNF-α, lipid profile, fasting plasma glucose and insulin levels, homeostatic model assessment-insulin resistance (HOMA-IR), endothelial-dependent flow-mediated dilation (FMD) of brachial artery, right common carotid intima-media thickness (IMT) and artery stiffness indices [(Young elastic modulus (YEM), stiffness index (SI) and carotid arterial compliance (CAC)] by Doppler Ultrasound were assessed at baseline and after 20 weeks treatment. Tolerability was measured using hematological and biochemical analysis. Statistical significance was accepted at $p \leq .05$.
**Results**: FMD improved as $25.66 \pm 6.47\%$ versus $12.41 \pm 3.22\%$, $p < 0.01$; and HOMA-IR decreased as $7.05 \pm 3.48$ versus $11.32 \pm 6.08$, $p < 0.01$, from baseline in drug group as compared to placebo group, whereas endothelium-independent vasodilatation ($p = 0.23$) and baseline brachial artery diameter ($p = 0.95$) remained unchanged in both the groups. Serum triglyceride ($p = 0.04$), hsCRP ($p < 0.01$) and TNF-α ($p < 0.01$) levels were considerably altered, but there was no effect on carotid IMT, YEM, CAC and SI (all $p \geq 0.05$). Safety variables were significantly altered, but were still found with-in the normal limits.
**Conclusion**: Thus, sulfasalazine may prevent CVD risk by reducing insulin resistance and endothelial dysfunction via halting inflammatory process.

## Marfan Syndrome with type-1 diabetes and pulmonary tuberculosis – A rare case

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This paper brings forth a rare case of Marfan Syndrome with Type-1 diabetes and pulmonary tuberculosis.
A 17-year-old male presented to our hospital in an emaciated condition with complaints of polyuria, cough and fever. Based on patients history, clinical and standard laboratory assessment he was diagnosed with Type-1 diabetes. His chest radiograph and sputum examination confirmed the diagnosis of pulmonary tuberculosis. In countries like India, diabetes remains one of the most important risk factors predisposing towards tuberculosis. The development of tuberculosis occurred 10 times more frequently in type-1 diabetics. The diagnosis of MFS was made according to the "Revised Ghent criteria" taking into consideration the features of eyes, cardiovascular system, skeleton, skin, and respiratory system in the present case.
Marfan Syndrome, a rare autosomal dominant disorder was first reported way back in 1896 by Antonin Marfan. Abnormal signaling of Transforming Growth Factor-β (TGF-β) has been implicated in pathogenesis of MFS. TGF-β was found to have several immunological effects, but its role in the pathogenesis of type-1 and type-2 diabetes is still not well understood.
The association of MFS with type-1 diabetes was rarely reported in the past. After a thorough review of literature, only two cases of MFS with type-1 diabetes have been reported around the world so far. Although this co-occurrence can be coincidental, a common immunological pathway pertaining to TGF-β may exist. This paper, henceforth, lays emphasis on intense research on these specific developments.

## Subclinical atherosclerosis and left ventricular diastolic dysfunction – Their correlation in Indian T2DM patients

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**Aim**: To assess the correlation of LVDD with CIMT (carotid intima media thickness) and baPWV – the subclinical atherosclerotic risk markers.
**Methods**: 565 with diabetes mellitus, aged between 35 and 75 years were evaluated for left LVDD using Doppler Echo. LVDD was determined by using conventional 2-Decho and Doppler techniques and LVDD was graded as grade I, II, III, and IV, as per standard norms. Parameters such as CIMT, baPWV, ABI, SBP, DBP, Lipid Profile, HbA1c, duration of diabetes, and WHR were included. LVEF was considered as a measure of systolic dysfunction.
**Results**: LVDD was observed in 84.6% of patients. Predominant pattern was abnormal relaxation (58%) with highest in age group of 35–73 years. Out of 565 patients studied, total 478 (84.6%) had LVDD, 347 patients (69.4%) had (Grade 1 DD), 104 patients (20.8%) had (Grade 2), 27 patients (5.4%) had (Grade 3). 87 out (15.4%) had no evidence of diastolic dysfunction. LVDD was found to have significant correlation with SBP ($p = 0.015$), ABI ($p = 0.034$), LDL ($p = 0.06$), HDL ($p = 0.07$) and TG's ($p = 0.18$). Correlation of LVDD with PWV and CIMT is found to be mild significant.
**Conclusion**: LVDD had mild correlation with CIMT and PWV in this group of population. Since both CIMT and PWV are future cardiovascular risk markers, such correlation warrants screening of diabetic population for these atherosclerotic risk markers for prevention of future cardiovascular risk. However, larger study is needed to observe more correlation between these parameters.

## Correlation of microalbuminuria with obesity and cardiovascular risk markers in type-II diabetic North Indian Punjabi population

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**Background and aims**: Microalbuminuria has been identified as a predictor of renal failure and an independent risk factor for cardiovascular disease in patients with diabetes mellitus as well as in general population. This study was aimed to determine the correlation of microalbuminuria with Obesity and Cardiovascular risk markers.
**Methods and materials**: 2044 type-II diabetes patients were enrolled in the study. Microalbuminuria in all the subjects was estimated and the albumin to creatinine ratio (A:C) determined. Obesity parameters (BMI, WHR), HbA1c, baPWV, Blood Pressure, ABI, LDL, HDL, TGs of all the subjects were also measured. baPWV was measured with VP-2000/1000-Colin Corporation, (hyayashi komaki Japan). Microalbuminuria was measured Clinitek status Analyzer (Bayer Health Care).